

Figure 1

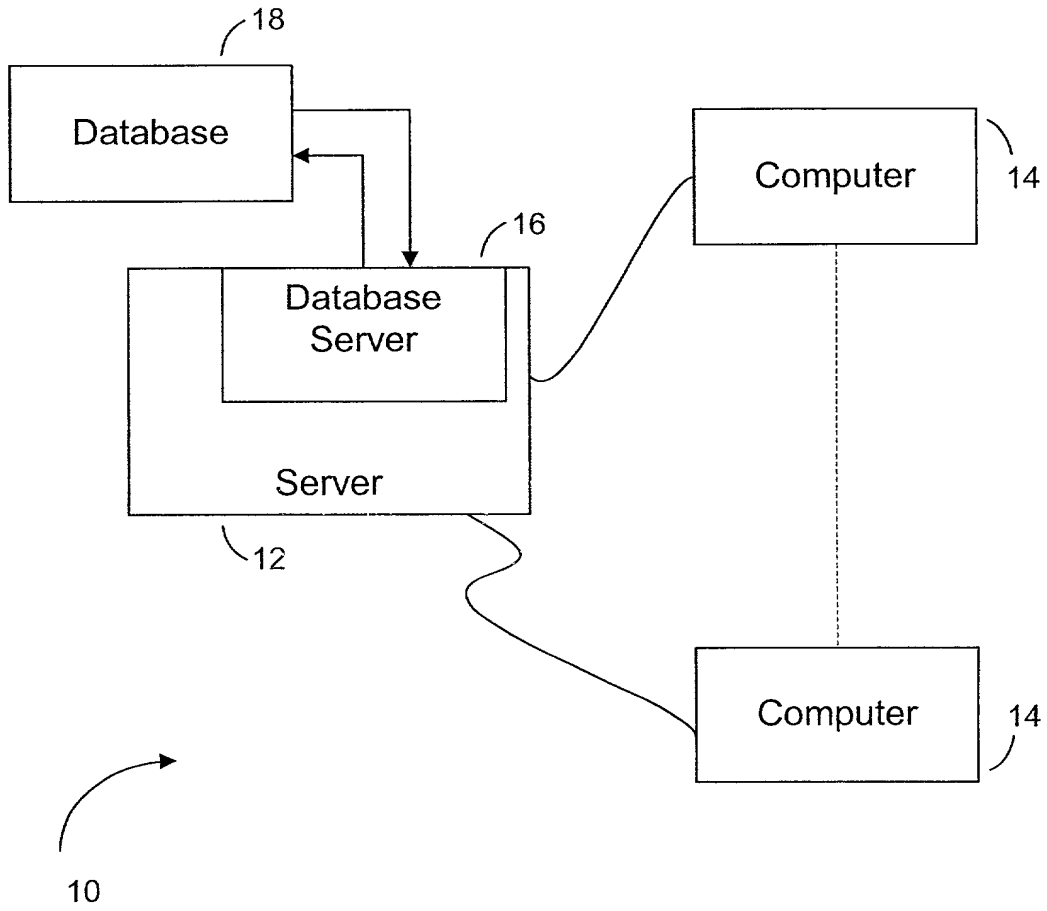


Figure 2

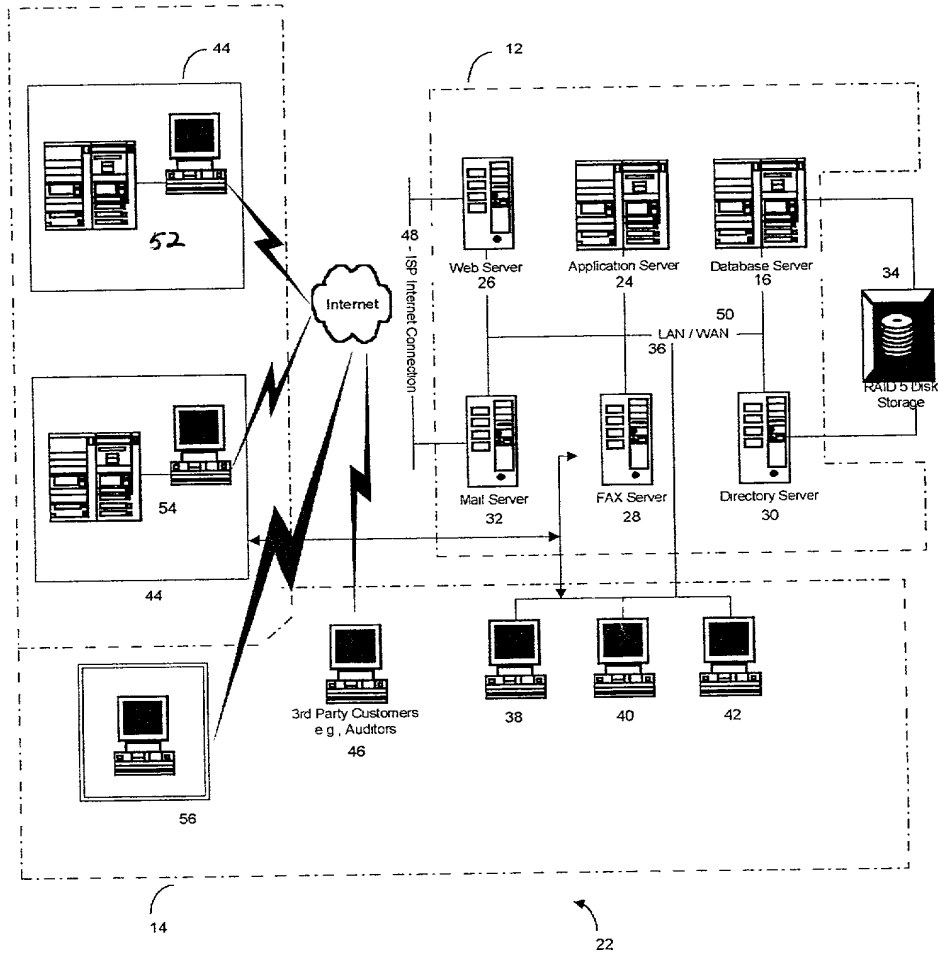
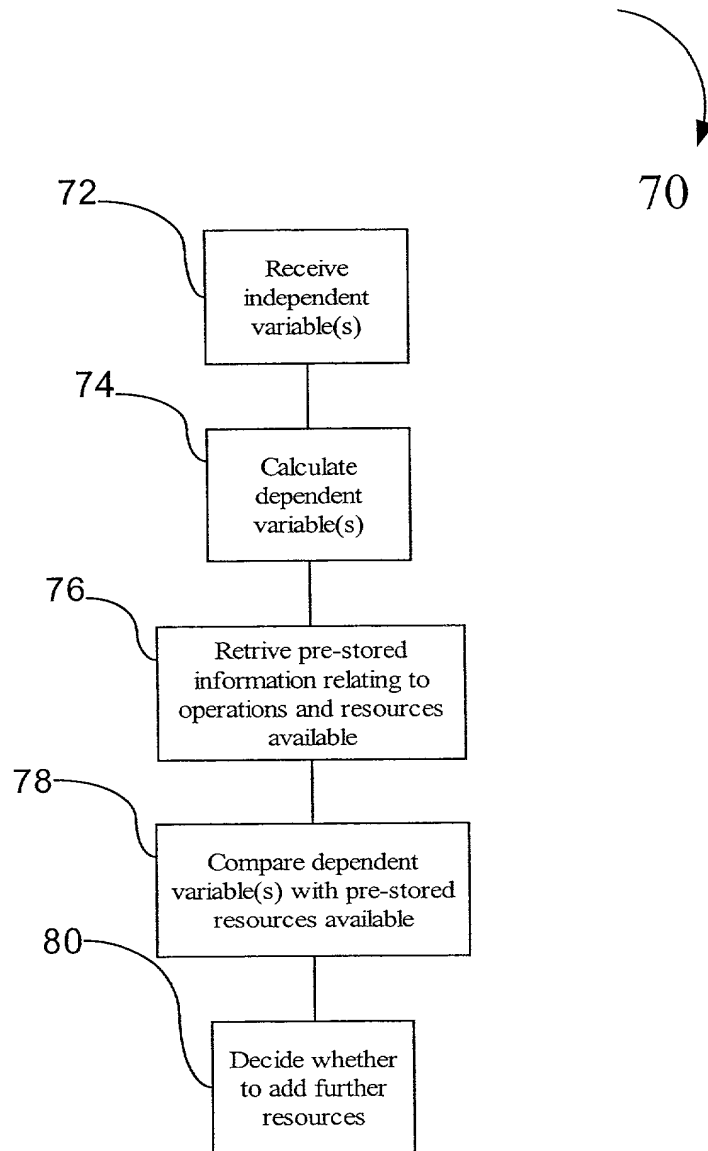


Figure 3



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A		B		C		D	
1		Create Summary Sheet For This Capacity Scenario		TOTAL OVER MAX		1	
2				TOTAL FTEs		106	
3							
4				TOTAL \$		8,963,844,235	
5				CAPACITY \$		8,209,439,666 \$ 754,404,569	
526	Variable Group	INDEPENDENT VARIABLES					
527	Volume	1999 Monthly Volume		Traditional Business		E-Commerce	
528	Volume	JAN		\$ 190,300		\$ 22,836	
529	Volume	FEB		\$ 200,625		\$ 22,836	
530	Volume	MAR		\$ 229,896		\$ 22,836	
531	Volume	APR		\$ 221,168		\$ 22,836	
532	Volume	MAY		\$ 218,824		\$ 22,836	
533	Volume	JUN		\$ 232,036		\$ 22,836	
534	Volume	JUL		\$ 215,438		\$ 22,836	
535	Volume	AUG		\$ 245,947		\$ 22,836	
536	Volume	SEP		\$ 246,471		\$ 22,836	
537	Volume	OCT		\$ 290,905		\$ 22,836	
538	Volume	NOV		\$ 325,516		\$ 22,836	
539	Volume	DEC		\$ 402,285		\$ 22,836	
540	Volume	2000 Annual % Increase in Volume		10%		10%	
541	Volume	CAPACITY - 2001 Annual % Increase in Volume		257000%		257000%	
542	Volume	Daily Volume Ratios / Monthly Vol Conv. Const					
543	Volume	1st Monday		43			
544	Volume	1st Tuesday		1			
545	Volume	1st Wednesday		10			
546	Volume	1st Thursday		17			
547	Volume	1st Friday		9			
548	Volume	2nd Monday		46			
549	Volume	2nd Tuesday		8			
550	Volume	2nd Wednesday		14			
551	Volume	2nd Thursday		11			
552	Volume	2nd Friday		11			
553	Volume	3rd Monday		39			
554	Volume	3rd Tuesday		19			
555	Volume	3rd Wednesday		13			
556	Volume	3rd Thursday		9			
557	Volume	3rd Friday		14			
558	Volume	4th Monday		48			
559	Volume	4th Tuesday		6			
560	Volume	4th Wednesday		16			
561	Volume	4th Thursday		10			
562	Volume	4th Friday		16			
563	Volume	5th Monday		48			
564	Volume	5th Tuesday		6			
565	Assignments	% Assignments Work/Time NOT on Invoice Processing		5%			
566	Assignments	Average # Manual Invoices per 1MM Volume		276		0	
567	Assignments	Average Hourly Wage - Assignments		\$ 13.09			
568	Assignments	Average Invoice Assignment Time (Seconds)		5 2			
569	Cash Application	Average Hourly Wage - Cash Application		\$ 13.09			
570	Cash Application	Average Payment Application Time (Seconds)		38 35			
571	Cash Application	% Cash Application Work/Time NOT on Original Applications		5%			
572	Cash Application	Cash Application Error Acceleration Factor		88			
573	Cash Application	Average # Manual Payments per 1MM Volume		33		19	
574	Adjustments	Average # Invoices per Payment		3 11		1999 Value	
575	Adjustments	% Adjustments Work Actually Clearing an Item		63%		90.00%	
576	Adjustments	% Adjustments Created by Customer A/R Item Error		3.33%			
577	Adjustments	% Adjustments From Other Error		0 63%			
578	Adjustments	% Adjustments Created by Client A/R Item Error		0.19%		1999 Value	
579	Adjustments	% A/R Items With No Error		99.90%		99.95%	
580	Adjustments	% Adjustments Created by Client/Customer Mix A/R Item Error		0.86%		1999 Value	
581	Adjustments	# Credit Memos (CMs) per 1MM Monthly Volume		35		35	
582	Adjustments	Average CM Value		\$ 1,715.00			
583	Adjustments	Average CM Action Time (minutes)		0.18			
584	Adjustments	Average Hourly Wage - Adjustments		\$ 11.06			
585	Adjustments	Average Adjustment Action Time (Minutes) (w/o CMs)		1.09			
586	Adjustments	Average Adjustment Item Value (w/o CMs)		\$ 3,776.00			
587	Collections	Average Hourly Wage - GECIS Collectors		\$ 9.00			
588	Collections	Average Hourly Wage - H.P. Collectors		\$ 15.18			
589	Collections	Average Hourly Wage - Collections Assitant		\$ 11.06			
590	Collections	Ratio of Assistants to Collectors		0.17			
591	Collections	Maximum # of H.P. Collectors (Others are GECIS)		15			
592	Collections	Average Collections Call Time (Minutes)		2.67			
593	Collections	% Collections Work/Time NOT Outbound Calls		41%			
594	Collections	% Volume Becoming Overdue		31%			
595	Collections	Average Past Due \$ per Past Due Customer		\$ 8.343			
596	Collections	% Past Due % Becoming Bad Debt		0.03%			
597	Collections	% Overdue Paying w/o Collections Activity		64.412%			
598	Collections	# Calls per Month Req. to Clear Cust.		2			
599	Collections	Maximum # Collectors Added One Hiring		5			
600	Client Services	Average Hourly Wage - Client Services		\$ 15.24			
601	Client Services	Baseline Funding Error Rate (% Total Fundings)		0.14%			
602	Client Services	% Client Services Worktime NOT Funding		15%			
603	Client Services	Client Services Accuracy Coefficient		0.0000239			
604	Client Services	# Manual Funding Requests per 1MM Monthly Volume		6		1	
605	Tolerance	Allowable Assignments Backlog (Invoices/Day)		0			
606	Tolerance	Allowable Cash Application Backlog ("Records"/Day)		1			
607	Tolerance	Allowable Adjustments Backlog (% Monthly Volume)		5%			

FIG. 4

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	A	B	C	D
608	Tolerance	Allowable Collections % Volume Past Due	25%	
609	Labor	# Productive Work-Hours per Day	7	
610	Labor	% Total Available Hours Not Worked	10%	
611	Labor	# Work-Days Allowable Missed Tolerance	5	
612	Labor	% Overtime Possible	20%	
613	File/Mail/Imaging	Average Hourly Wage - File/Mail/Imaging Department	\$ 9.73	
614	File/Mail/Imaging	# File/Mail/Imaging FTEs required per 1MM Monthly Volume	0.0558	0.0056
615	Capacity	Maximum Allowable Assignments FTEs	5	
616	Capacity	Maximum Allowable Cash Application FTEs	20	
617	Capacity	Maximum Allowable Adjustments FTEs	15	
618	Capacity	Maximum Allowable Collections FTEs	26	
619	Capacity	Maximum Allowable Client Services FTEs	5	
620	Capacity	Maximum Allowable File/Mail/Imaging FTEs	100	

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FIG. 5

[illegible]

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	I	J	K	L	M	N	O	P
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FIG. 6

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	Q	R	S	T	U	V	W	X
1					-13			
2					7			
3								
4	Assignments FTE Hiring Trigger	# New Manual Invoices	# Backlogged Invoices	Daily Invoice Processing Capacity (# Man. Inv's)	# Cash Application FTEs	Cash App. FTE Cost	Cash App. FTE Hiring Trigger	# New Manual Payments
5	0	-	0	0	7	\$ 687	0	-
526	0	15,428	-	21808	7	\$ 687	1	1,978
527	0	359	-	21808	7	\$ 893	2	46
528	0	3,588	-	21808	7	\$ 893	3	460
529	0	6,099	-	21808	7	\$ 893	4	782
530	0	3,229	-	21808	7	\$ 893	5	414
531	0	16,504	-	21808	6	\$ 766	0	2,116
532	0	2,870	-	21808	6	\$ 589	1	368
533	0	5,023	-	21808	6	\$ 766	2	644
534	0	3,947	-	21808	6	\$ 766	3	506
535	0	3,947	-	21808	6	\$ 766	4	506
536	0	13,993	-	21808	6	\$ 766	5	1,794
537	0	6,817	-	21808	5	\$ 638	0	874
538	0	4,664	-	21808	5	\$ 491	1	598
539	0	3,229	-	21808	5	\$ 638	2	414
540	0	5,023	-	21808	5	\$ 638	3	644
541	0	17,222	-	21808	5	\$ 638	4	2,208
542	0	2,153	-	21808	5	\$ 638	5	276
543	0	5,741	-	21808	4	\$ 511	0	736
544	0	3,588	-	21808	4	\$ 393	1	460
545	0	5,741	-	21808	4	\$ 511	2	736
546	0	17,222	-	21808	4	\$ 511	3	2,208
547	0	2,153	-	21808	4	\$ 511	4	276

FIG. 7

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	Y	Z	AA	AB	AC	AD	AE	AF
1			-6					
2			9					
3								
	# Backlogged Payments	# Manual Payments Application Capacity	# Adjustments FTEs	Adjustments FTE Cost	Adjustments FTE Hiring Trigger	# CMs Created	# Other Adjustment Items Created	\$ Adjustments Items Created
4	0	0	3	\$ 249	1	0	\$ -	0
5	-	3933	3	\$ 249	2	2197	1104	\$ 7,935,958
526	-	4719	3	\$ 249	3	511	26	\$ 184,557
527	-	4719	3	\$ 249	4	869	257	\$ 1,845,572
528	-	4719	3	\$ 249	5	460	436	\$ 3,137,472
529	-	4719	3	\$ 249	0	2351	231	\$ 1,661,014
530	-	4045	2	\$ 216	1	409	1181	\$ 8,489,629
531	-	3371	2	\$ 166	2	715	205	\$ 1,476,457
532	-	4045	2	\$ 166	3	562	359	\$ 2,583,800
533	-	4045	2	\$ 166	4	562	282	\$ 2,030,129
534	-	4045	2	\$ 166	5	1993	282	\$ 2,030,129
535	-	4045	2	\$ 166	0	971	1001	\$ 7,197,729
536	-	3371	1	\$ 108	1	664	488	\$ 3,506,586
537	-	2809	1	\$ 83	2	460	334	\$ 2,399,243
538	-	3371	1	\$ 83	3	715	231	\$ 1,661,014
539	-	3371	1	\$ 83	0	2453	359	\$ 2,583,800
540	-	3371	1	\$ 83	0	307	1232	\$ 8,858,743
541	-	3371	1	\$ 83	0	818	154	\$ 1,107,343
542	-	2697	1	\$ 83	0	511	411	\$ 2,952,914
543	-	2247	1	\$ 83	0	818	257	\$ 1,845,572
544	-	2697	1	\$ 83	0	818	411	\$ 2,952,914
545	-	2697	1	\$ 83	1	2453	1232	\$ 8,858,743
546	-	2697	1	\$ 83	2	307	154	\$ 1,107,343
547	-	2697	1	\$ 83				

FIG. 8



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	AG	AH	AI	AJ	AK	AL	AM	AN	AO
1								-11	
2								15	
3									
4	\$ CMs Backlog	\$ Other Adjustments Backlog	Total \$ Adjustments Backlog	% Volume Adjustments Backlog	# CMs Completed	# Other Adjustments Completed	Total \$ Adjustments Completed	# Collections FTEs (Collectors)	# Collections Assistants (All H.P.)
5	\$ 2,000,000	\$ 12,500,000	\$ 14,500,000	\$ -	\$ -	\$ -	\$ 0	15	0
526	\$ 4,829,821	\$ 14,533,722	\$ 19,363,542	3%	547	565	\$ 3,072,415	15	2
527	\$ 3,219,646	\$ 12,773,040	\$ 15,992,685	3%	990	492	\$ 3,555,414	15	2
528	\$ 2,177,595	\$ 10,974,847	\$ 13,152,441	2%	1119	733	\$ 4,685,815	15	2
529	\$ 2,089,773	\$ 9,731,162	\$ 11,820,935	2%	920	766	\$ 4,468,978	15	2
530	\$ 1,193,878	\$ 7,751,049	\$ 8,944,926	1%	982	755	\$ 4,537,023	15	2
531	\$ 4,377,564	\$ 10,207,441	\$ 14,585,005	2%	494	530	\$ 2,849,550	10	1
532	\$ 3,716,708	\$ 9,828,022	\$ 13,544,730	2%	794	306	\$ 2,516,732	10	1
533	\$ 3,698,517	\$ 9,987,614	\$ 13,686,131	2%	726	317	\$ 2,442,400	10	1
534	\$ 2,945,765	\$ 9,367,971	\$ 12,313,736	2%	1001	446	\$ 3,402,523	10	1
535	\$ 2,390,036	\$ 8,676,692	\$ 11,066,729	2%	886	465	\$ 3,277,136	10	1
536	\$ 4,436,113	\$ 10,645,252	\$ 15,081,365	3%	800	480	\$ 3,183,093	10	1
537	\$ 5,166,991	\$ 11,671,369	\$ 16,838,360	3%	545	216	\$ 1,749,591	5	0
538	\$ 5,610,119	\$ 12,359,418	\$ 17,969,538	3%	406	151	\$ 1,268,065	5	0
539	\$ 5,690,547	\$ 12,664,224	\$ 18,354,771	3%	413	150	\$ 1,275,781	5	0
540	\$ 5,932,744	\$ 13,224,122	\$ 19,156,866	3%	574	211	\$ 1,781,705	5	0
541	\$ 9,155,912	\$ 17,078,676	\$ 26,234,588	4%	574	211	\$ 1,781,021	5	0
542	\$ 8,889,911	\$ 17,123,101	\$ 26,013,012	4%	462	142	\$ 1,328,919	5	0
543	\$ 9,516,807	\$ 18,130,673	\$ 27,647,480	5%	452	144	\$ 1,318,446	0	0
544	\$ 9,612,232	\$ 18,558,805	\$ 28,171,037	5%	455	143	\$ 1,322,014	2	0
545	\$ 10,240,351	\$ 19,565,933	\$ 29,806,284	5%	451	144	\$ 1,317,668	2	0
546	\$ 13,667,739	\$ 23,676,221	\$ 37,343,961	6%	455	143	\$ 1,321,067	2	0
547	\$ 13,363,179	\$ 23,734,666	\$ 37,097,845	6%	484	139	\$ 1,353,459	2	0

FIG 9



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FIG. 11

202, 202, 202

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FIG. 12

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SCENARIO NAME:

Variable Group	INDEPENDENT VARIABLES	Run Scenarios	
		Traditional Business	E-Commerce
Volume	1999 Monthly Volume		
Volume	JAN	\$ 190,300,000	\$ 1
Volume	FEB	\$ 200,625,000	\$ 1
Volume	MAR	\$ 229,896,000	\$ 1
Volume	APR	\$ 221,168,000	\$ 1
Volume	MAY	\$ 218,824,000	\$ 1
Volume	JUN	\$ 232,036,000	\$ 1
Volume	JUL	\$ 215,438,000	\$ 1
Volume	AUG	\$ 245,947,000	\$ 1
Volume	SEP	\$ 246,471,000	\$ 1
Volume	OCT	\$ 290,905,000	\$ 1
Volume	NOV	\$ 325,516,000	\$ 1
Volume	DEC	\$ 402,285,000	\$ 1
Volume	2000 Annual % Increase in Volume	37%	257500000%
Volume	2001 Annual % Increase in Volume	60%	2457%
Volume	2002 Annual % Increase in Volume	24%	324%
Volume	2003 Annual % Increase in Volume	23%	132%
Volume	Daily Volume Ratios / Monthly Vol Conv. Const.		
Volume	1st Monday	43	
Volume	1st Tuesday	1	
Volume	1st Wednesday	10	
Volume	1st Thursday	17	
Volume	1st Friday	9	
Volume	2nd Monday	46	
Volume	2nd Tuesday	8	
Volume	2nd Wednesday	14	
Volume	2nd Thursday	11	
Volume	2nd Friday	11	
Volume	3rd Monday	39	
Volume	3rd Tuesday	19	
Volume	3rd Wednesday	13	
Volume	3rd Thursday	9	
Volume	3rd Friday	14	
Volume	4th Monday	48	
Volume	4th Tuesday	6	
Volume	4th Wednesday	16	
Volume	4th Thursday	10	
Volume	4th Friday	16	
Volume	5th Monday	48	
Volume	5th Tuesday	6	
Assignments	% Assignments Work/Time NOT on Invoice Processing	5%	
Assignments	Average # Manual Invoices per 1MM Volume	368	0
Assignments	Average Hourly Wage - Assignments	\$ 13.09	
Assignments	Average Invoice Assignment Time (Seconds)	8	
Cash Application	Average Hourly Wage - Cash Application	\$ 13.09	
Cash Application	Average Payment Application Time (Seconds)	59	
Cash Application	% Cash Application Work/Time NOT on Original Applications	5%	
Cash Application	Cash Application Error Acceleration Factor	88	
Cash Application	Average # Manual Payments per 1MM Volume	133	75
Adjustments	Average # Invoices per Payment	3.11	1999 Value
Adjustments	% Adjustments Work Actually Clearing an Item	63%	90.00%
Adjustments	% Adjustments Created by Customer A/R Item Error	3.33%	
Adjustments	% Adjustments From Other Error	0.63%	
Adjustments	% Adjustments Created by Client A/R Item Error	0.25%	1999 Value
Adjustments	% A/R Items With No Error	99.84%	99.95%
Adjustments	% Adjustments Created by Client/Customer Mix A/R Item Error	0.98%	1999 Value
Adjustments	# Credit Memos (CMs) per 1MM Monthly Volume	35	35
Adjustments	Average CM Value	\$ 1,715.00	
Adjustments	Average CM Action Time (minutes)	0.36	
Adjustments	Average Hourly Wage - Adjustments	\$ 11.06	

FIG. 13

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Adjustments	Average Adjustment Action Time (Minutes) (w/o CMs)	1.70	
Adjustments	Average Adjustment Item Value (w/o CMs)	\$ 3,776.00	
Collections	Average Hourly Wage - GECIS Collectors	\$ 9.00	
Collections	Average Hourly Wage - H.P. Collectors	\$ 15.18	
Collections	Average Hourly Wage - Collections Assitant	\$ 11.06	
Collections	Ratio of Assistants to Collectors	0.17	
Collections	Maximum # of H.P. Collectors (Others are GECIS)	100	
Collections	Average Collections Call Time (Minutes)	6.3	
Collections	% Collections Work/Time NOT Outbound Calls	45%	
Collections	% Volume Becoming Overdue	31%	
Collections	Average Past Due \$ per Past Due Customer	\$ 8,343	
Collections	% Past Due % Becoming Bad Debt	0.03%	
Collections	% Overdue Paying w/o Collections Activity	64.412%	
Collections	# Calls per Month Req. to Clear Cust.	2	
Collections	Maximum # Collectors Added One Hiring	5	
Client Services	Average Hourly Wage - Client Services	\$ 15.24	
Client Services	Baseline Funding Error Rate (% Total Fundings)	0.14%	
Client Services	% Client Services Worktime NOT Funding	25%	
Client Services	Client Services Accuracy Coefficient	0.0000239	
Client Services	# Manual Funding Requests per 1MM Monthly Volume	12	2
Tolerance	Allowable Assignments Backlog (Invoices/Day)	0	
Tolerance	Allowable Cash Application Backlog ("Records"/Day)	1	
Tolerance	Allowable Adjustments Backlog (% Monthly Volume)	5%	
Tolerance	Allowable Collections % Volume Past Due	25%	
Labor	# Productive Work-Hours per Day	7	
Labor	% Total Available Hours Not Worked	10%	
Labor	# Work-Days Allowable Missed Tolerance	5	
Labor	% Overtime Possible	20%	
File/Mail/Imaging	Average Hourly Wage - File/Mail/Imaging Department	\$ 9.73	
File/Mail/Imaging	# File/Mail/Imaging FTEs required per 1MM Monthly Volume	0.0558	0.0056
Capacity	Maximum Allowable Assignments FTEs	5	
Capacity	Maximum Allowable Cash Application FTEs	8	
Capacity	Maximum Allowable Adjustments FTEs	6	
Capacity	Maximum Allowable Collections FTEs	22	
Capacity	Maximum Allowable Client Services FTEs	5	
Capacity	Maximum Allowable File/Mail/Imaging FTEs	20	

FIG. 14

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[illegible]FIG. 17

Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Education (years)	Mean (SD)
Male	12.5 (2.1)
Female	12.8 (2.3)
Marital status	
Married	78%
Single	22%
Occupation	
Professional	35%
Managerial	25%
Skilled	20%
Unskilled	20%
Retired	10%
Income (USD/month)	Mean (SD)
Male	1,200 (300)
Female	1,150 (280)
Health insurance	
Yes	85%
No	15%
Smoking status	
Smoker	15%
Non-smoker	85%
Alcohol consumption	
Regular	5%
Occasional	10%
Never	85%
Family size	Mean (SD)
Male	3.2 (1.5)
Female	3.5 (1.8)
Comorbidities	
Hypertension	30%
Diabetes	15%
Cholesterol	25%
Asthma	10%
Depression	12%
Medication use	
Antidepressants	10%
Antipsychotics	5%
Mood stabilizers	8%
Other	15%
Adherence to treatment	
High	60%
Low	40%

[illegible]

FIG. 18

Parameter	Value	Unit
$\alpha$	0.001	
$\beta$	0.001	
$\gamma$	0.001	
$\delta$	0.001	
$\epsilon$	0.001	
$\zeta$	0.001	
$\eta$	0.001	
$\theta$	0.001	
$\iota$	0.001	
$\kappa$	0.001	
$\lambda$	0.001	
$\mu$	0.001	
$\nu$	0.001	
$\xi$	0.001	
$\omicron$	0.001	
$\pi$	0.001	
$\rho$	0.001	
$\sigma$	0.001	
$\tau$	0.001	
$\upsilon$	0.001	
$\phi$	0.001	
$\chi$	0.001	
$\psi$	0.001	
$\omega$	0.001	
$\Omega$	0.001	
$\Theta$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	
$\Phi$	0.001	
$\Psi$	0.001	
$\Xi$	0.001	
$\Omicron$	0.001	
$\Pi$	0.001	
$\Sigma$	0.001	
$\Upsilon$	0.001	

FIG. 19

[illegible]FIG. 20

Time	Temperature	Pressure	Flow rate	Concentration	Yield	Quality	Notes
0:00	25.0	1.0	1.0	0.1	0.0	0.0	Start
0:10	25.0	1.0	1.0	0.1	0.0	0.0	
0:20	25.0	1.0	1.0	0.1	0.0	0.0	
0:30	25.0	1.0	1.0	0.1	0.0	0.0	
0:40	25.0	1.0	1.0	0.1	0.0	0.0	
0:50	25.0	1.0	1.0	0.1	0.0	0.0	
1:00	25.0	1.0	1.0	0.1	0.0	0.0	
1:10	25.0	1.0	1.0	0.1	0.0	0.0	
1:20	25.0	1.0	1.0	0.1	0.0	0.0	
1:30	25.0	1.0	1.0	0.1	0.0	0.0	
1:40	25.0	1.0	1.0	0.1	0.0	0.0	
1:50	25.0	1.0	1.0	0.1	0.0	0.0	
2:00	25.0	1.0	1.0	0.1	0.0	0.0	
2:10	25.0	1.0	1.0	0.1	0.0	0.0	
2:20	25.0	1.0	1.0	0.1	0.0	0.0	
2:30	25.0	1.0	1.0	0.1	0.0	0.0	
2:40	25.0	1.0	1.0	0.1	0.0	0.0	
2:50	25.0	1.0	1.0	0.1	0.0	0.0	
3:00	25.0	1.0	1.0	0.1	0.0	0.0	
3:10	25.0	1.0	1.0	0.1	0.0	0.0	
3:20	25.0	1.0	1.0	0.1	0.0	0.0	
3:30	25.0	1.0	1.0	0.1	0.0	0.0	
3:40	25.0	1.0	1.0	0.1	0.0	0.0	
3:50	25.0	1.0	1.0	0.1	0.0	0.0	
4:00	25.0	1.0	1.0	0.1	0.0	0.0	
4:10	25.0	1.0	1.0	0.1	0.0	0.0	
4:20	25.0	1.0	1.0	0.1	0.0	0.0	
4:30	25.0	1.0	1.0	0.1	0.0	0.0	
4:40	25.0	1.0	1.0	0.1	0.0	0.0	
4:50	25.0	1.0	1.0	0.1	0.0	0.0	
5:00	25.0	1.0	1.0	0.1	0.0	0.0	
5:10	25.0	1.0	1.0	0.1	0.0	0.0	
5:20	25.0	1.0	1.0	0.1	0.0	0.0	
5:30	25.0	1.0	1.0	0.1	0.0	0.0	
5:40	25.0	1.0	1.0	0.1	0.0	0.0	
5:50	25.0	1.0	1.0	0.1	0.0	0.0	
6:00	25.0	1.0	1.0	0.1	0.0	0.0	
6:10	25.0	1.0	1.0	0.1	0.0	0.0	
6:20	25.0	1.0	1.0	0.1	0.0	0.0	
6:30	25.0	1.0	1.0	0.1	0.0	0.0	
6:40	25.0	1.0	1.0	0.1	0.0	0.0	
6:50	25.0	1.0	1.0	0.1	0.0	0.0	
7:00	25.0	1.0	1.0	0.1	0.0	0.0	
7:10	25.0	1.0	1.0	0.1	0.0	0.0	
7:20	25.0	1.0	1.0	0.1	0.0	0.0	
7:30	25.0	1.0	1.0	0.1	0.0	0.0	
7:40	25.0	1.0	1.0	0.1	0.0	0.0	
7:50	25.0	1.0	1.0	0.1	0.0	0.0	
8:00	25.0	1.0	1.0	0.1	0.0	0.0	
8:10	25.0	1.0	1.0	0.1	0.0	0.0	
8:20	25.0	1.0	1.0	0.1	0.0	0.0	
8:30	25.0	1.0	1.0	0.1	0.0	0.0	
8:4							

FIG. 21

[illegible]FIG. 22



[illegible][illegible]

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FIG. 24



[illegible]FIG. 25

[illegible]

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[illegible]

FIG. 26

[illegible]FIG. 27

[illegible]FIG. 28

FIG. 29



[illegible][illegible]

FIG. 30

[illegible]FIG. 31

[illegible]FIG. 32



FIG. 33



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

FIG. 35

FIG. 35

a) $\Delta H_{\text{cal}}^{\text{cal}}(\text{cal/g})$	
1	100
2	100
3	100
4	100
5	100
6	100
7	100
8	100
9	100
10	100
11	100
12	100
13	100
14	100
15	100
16	100
17	100
18	100
19	100
20	100
21	100
22	100
23	100
24	100
25	100
26	100
27	100
28	100
29	100
30	100
31	100
32	100
33	100
34	100
35	100
36	100
37	100
38	100
39	100
40	100
41	100
42	100
43	100
44	100
45	100
46	100
47	100
48	100
49	100
50	100
51	100
52	100
53	100
54	100
55	100
56	100
57	100
58	100
59	100
60	100
61	100
62	100
63	100
64	100
65	100
66	100
67	100
68	100
69	100
70	100
71	100
72	100
73	100
74	100
75	100
76	100
77	100
78	100
79	100
80	100
81	100
82	100
83	100
84	100
85	100
86	100
87	100
88	100
89	100
90	100
91	100
92	100
93	100
94	100
95	100
96	100
97	100
98	100
99	100
100	100

FIG. 36

[illegible]FIG. 37

[illegible][illegible]

FIG. 38



Variable	Mean	SD	Min	Max
Age	38.5	10.5	25	55
Gender	0.5	0.5	0	1
Marital status	0.7	0.5	0	1
Education	12.5	1.5	10	15
Income	1500	500	1000	2000
Health status	0.8	0.4	0	1
Stress level	3.5	1.5	1	5
Life satisfaction	4.0	1.0	1	5
Work satisfaction	3.8	1.2	1	5
Family satisfaction	4.2	1.1	1	5
Community satisfaction	3.9	1.3	1	5
Overall satisfaction	3.7	1.4	1	5

FIG. 39

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	142	144	146	148	150	152	154	156	158	160	162	164	166	168	170	172	174	176	178	180	182	184	186	188	190	192	194	196	198	200
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	90	93	96	99	102	105	108	111	114	117	120	123	126	129	132	135	138	141	144	147	150	153	156	159	162	165	168	171	174	177	180	183	186	189	192	195	198	201	204	207	210	213	216	219	222	225	228	231	234	237	240	243	246	249	252	255	258	261	264	267	270	273	276	279	282	285	288	291	294	297	300
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	104	108	112	116	120	124	128	132	136	140	144	148	152	156	160	164	168	172	176	180	184	188	192	196	200	204	208	212	216	220	224	228	232	236	240	244	248	252	256	260	264	268	272	276	280	284	288	292	296	300	304	308	312	316	320	324	328	332	336	340	344	348	352	356	360	364	368	372	376	380	384	388	392	396	400
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230																																																						

FIG. 40



[illegible]FIG. 41

FIG. 41

[illegible]

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[illegible]